

# ASSESSMENT OF ENVIRONMENTAL IMPACTS

The purpose of this chapter is to explain the potential environmental effects of the management plan. An analysis of the environmental effects or impacts is an important element of the Environmental Assessment (EA) for the master plan. The intent of the EA is to disclose the environmental effects of an action (the master plan) to decision-makers and the public. Chapter 2 of this document describes the action or preferred management alternative. Chapter 5 describes and evaluates the various alternatives that were considered, but not selected, while the preferred alternative was being developed. No single alternative was chosen as the preferred alternative. Elements of several alternatives were incorporated into the final preferred alternative. The EA has been prepared to meet the requirements of the Wisconsin Environmental Policy Act (WEPA) and Chapter NR 150 of Wisconsin Administrative Code.

In addition to state and local approvals, the Federal Energy Regulatory Commission (FERC) must also approve the content of the master plan. This is to assure compliance with the terms and conditions of the FERC licenses held by Wisconsin Electric.

A detailed description of the elements of the proposed action is contained in Chapter Two of this document. A listing of anticipated impacts from both land management and proposed facility development activities follows, indexed by affected resources.

#### IMPACTS ON AIR QUALITY

During construction activities, dust may be present in the air surrounding project areas. Application of water from tank trucks is a common dust suppression practice that is used during road construction. This technique may be appropriate for some projects within the forest. Impacts on air quality from fugitive dust particles and engine exhaust emissions from construction equipment would be finite and transitory in nature. When construction is complete no residual impacts to air quality would be detectable.

Vehicle emissions generated as a result of logging activities are expected to be relatively unremarkable. Further, much of the logging used to implement vegetation management goals takes place during off-peak recreational seasons.

The impacts to air quality from motor vehicles attracted to the forest by the establishment of the 31 campsites at Old Veteran's Lake, improved boat landings, hiking, biking and cross country ski trails; equestrian camping or horse trail use, or by the two new forest day-use recreation facilities, would be negligible. The current indirect source air permit thresholds pertain to sources with 1,500 or more parking spaces, or highway projects with peak vehicle traffic volume greater than 1,800 vehicles per hour. The traffic due to projected management and development in this plan is well below these levels.



#### IMPACTS ON GROUNDWATER RESOURCES

#### Wells, Use of groundwater

A number of new potable water wells would be drilled to serve the planned forest facilities. None of the wells would individually qualify as high capacity wells, however taken in aggregate, Peshtigo River State Forest may be classified as a "high capacity property". Because of the dispersed nature of these wells around the 9,200-acre site, their effect on the local water table is expected to be minimal. Continuous dedication of the forest to sustainable management is expected to safeguard aquifer recharge areas within the forest boundary.

#### Old Wells and the Groundwater

Further, any unused wells associated with former uses of the property have been or will be appropriately abandoned when no longer needed. Wells encountered as part of any future real estate transactions would also be appropriately abandoned. Sealing the groundwater from surface contamination and thereby protecting groundwater quality would be the effect.

#### Modern Septic Systems and Vault toilets

Modern septic systems developed to service forest facilities will be constructed to applicable local and state Department of Commerce standards, effectively safeguarding the groundwater from contamination. A number of vault-style toilets would also be developed to serve more remote areas of the forest. These are sealed from the groundwater and pumped regularly or as needed during the use season.

Any unused septic systems, drywells or other wastewater disposal systems associated with former uses of the property have been or will be appropriately abandoned when no longer needed. Septic Systems, drywells or other wastewater disposal systems encountered as part of any future real estate transactions would also be appropriately abandoned. This would have the effect of safeguarding the quality of the groundwater.

#### Impacts on Surface Water Resources

An increase in impervious surface area from infrastructure improvements will occur. Rooftops and hard-surfaced roads would be the main sources of sheet runoff. Road and path construction will avoid changing watercourse direction and flow, volume and velocity. Culverts will be sized accordingly. Pervious road and pathway surfaces would be used where impervious surfaces are not needed. Runoff from roadways and other impervious surfaces would be directed away from draining directly into nearby streams and lakes, thus minimizing any risks of water pollution from spilled or water-transported materials.

The impacts of stormwater runoff during timber harvesting would be mitigated by implementing a set of best management practices. These practices are available in the Timber Sale Handbook and are a part of every timber harvest contract on the forest.

Land acquisition for boundary expansion and management under the state forest master plan are measures that are anticipated to have a long-term beneficial effect on the surface water resources of the site and those receiving waters downstream. Most, including Eagle Creek, Little Eagle Creek, Medicine Brook, Campbell Creek, Handsaw Creek, and Beaver Creek are tributaries to the Peshtigo River or its flowages. Preservation of watershed resources would also affect Peshtigo Brook and other tributaries to the Oconto River

#### IMPACTS ON GEOLOGICAL RESOURCES

New drilled potable water wells would penetrate the underlying granite bedrock in some places, or tap moraine-based aquifers, however all wells would be drilled and installed according to state well drilling code, effectively minimizing any risk to the resource. Some rock excavation may be necessary for development of roads, parking lots, and facility foundations. Surface mining of rock is not anticipated.

#### IMPACTS ON VISUAL/SCENIC RESOURCES

New structures and facilities would be evident locally. The appearance of new structures such as buildings, roads, parking lots, and use areas would be a definite change from the existing. However, recreational structures will be sited and constructed to blend with the surrounding environment. The majority of these will be concentrated at the new day use areas on Caldron Falls Flowage and on High Falls Flowage.

Vegetative management in compliance with the 200-foot FERC license-required coastal buffer zone would assure that the visible shoreline would remain natural or be restored to more natural appearance in use areas of the forest. The natural shoreline management and shoreline buffer zones will preserve, and restore in some cases, the "just-like-Canada" look and feel of the Peshtigo River and its flowages.

Change in the visual qualities of the vegetative management areas would be noticeable over time as areas of forest are managed for certain objectives. Visual and audible affects would also be a by-product of the active management of forest vegetation.

Forest road signs, directional signs, and a major property identification sign would be the main outward signs of forest existence. Most other forest features would be similar to the existing visual characteristics of the region.



## IMPACTS ON LAND USE

The land use of the approximately 9,200 acres of former WPS lands purchased for this project would not change appreciably from its previous function as recreational land open to the public. Under FERC license terms the land was managed for public access to the water and general recreation. A 2002 "Letter of Concurrence" issued by DNR assured that these uses would continue under DNR ownership and management. One impact would be an anticipated increase in the level of active recreation on the state forest.

Most neighboring land use in the vicinity of Peshtigo River State Forest is residential, recreational, or commercial forest. Some areas of commercial business development also exist. It is not unlikely that some increase in service sector business could occur as spin-off of state forest uses. It is anticipated that some growth in recreation-oriented business development would take place in the vicinity the forest. Local planning and zoning codes would regulate such development.

Under previous ownership the forest resources of the property were professionally managed as a sustainable forest. DNR will also manage the property sustainably as a Wisconsin State Forest. The forest would be managed under two classifications, Native Community Management and Forest Production.

#### IMPACTS ON INFRASTRUCTURE AND TRANSPORTATION

The Peshtigo River State Forest already has an established recreational utilization level estimated to be at least 100,000 visitors per year. Some increase in the level of utilization is anticipated. Therefore, an increase in local traffic could be expected, with a corresponding local road maintenance increase.

Traffic through Crivitz would increase, especially during June, July and August.

Traffic counts on US 141 in the Crivitz area will probably increase due to forest visitation. It is anticipated that US 141 will be the route-of-choice for people accessing and departing Peshtigo River State Forest. From US 141 there are three principal routes of travel to the forest. Each is a County Trunk Highway. The two that pass through Crivitz (CTH 'W' and CTH 'A') are expected to receive the most use. The third, (CTH 'X') passes through the unincorporated village of Middle Inlet and will likely receive less use by forest visitors.

Local increases in recreation-generated traffic will be noted primarily in the months June, July and August when the majority of recreation takes place. Most vehicles visiting the forest would be automobiles or light trucks, vans, or SUVs. Some would be vehicles towing camp trailers, small boats, self-contained campers or motor homes. It is anticipated that these vehicles may have an effect of increased wear and tear on roadways in the vicinity of the forest, as well as increased traffic congestion at peak times.

A slight increase in heavy truck traffic may be noted while timber sale contracts are being executed. Because of the heavily forested aspect of the region the presence of logging trucks on local roads is not unusual. Warning signs are placed at the logging sites during working hours.

Peshtigo River State Forest will be a generator of solid waste. Wisconsin State Forests promote and participate in recycling programs to mitigate generation of non-recyclable material that must be disposed of in sanitary landfills. A licensed sanitary waste contractor will be hired to pick up recyclable waste and non-recyclable materials. Campers using remote walk-in campsites and day use areas will be required to observe a carry in, carry out policy.

Peshtigo River State Forest will also be a customer of Wisconsin Public Service Corp. for electric service. The primary uses of electricity at the forest will be for powering the buildings and pumping water.

# **IMPACTS OF NOISE**

Construction noise resulting from capital improvements such as road building, vegetation management, building construction and the like could have a moderate impact on the forest's neighbors and wildlife. All of these groups could be sensitive to this disruption, especially during warm weather when windows

may be open. This noise would be peak (high level, short duration) during construction periods, rather than continuous. When the activities cease the impacts would cease.

Forest management activities are also anticipated to generate characteristic but transient noises. Primary sources would be from chain saws, skidders, and other harvesting machinery, and from logging trucks.

The elevated presence and activities of forest visitors and campers may present a potential for reaction from neighbors or other forest visitors and thus an impact. Regulations on the use of amplified sound devices (radios, stereos, etc) and loud conduct exist for the purpose of minimizing the imposition of unwanted noise to neighbors of the forest as well as neighbors inside the forest, especially in camping situations.

#### IMPACTS ON RECREATIONAL RESOURCES

The establishment of a 31-unit campground will increase camping opportunities in the Marinette County area by 15 sites. The former 16-unit Old Veteran's Lake County Park has been acquired by the forest and will be upgraded and expanded. The expansion of Old Veteran's Lake campground may create a slight additional demand for campsites at local private and public campgrounds. This halo-effect is well known in other parts of the state. It is the policy of Wisconsin State Forests to work closely with other campground operators to assure that when the state forest campground is filled to capacity, any prospective campers seeking a campsite are referred to neighboring facilities that have vacancies.

Nine Primitive water access campsites have been planned for locations on Caldron Falls Reservoir and elsewhere in the forest. The precise sites for the Musky Point and other primitive water access campsites would be chosen in the field. The Department has the opportunity to assure that any primitive water access campsite would be located to minimize potential conflict with waterfowl hunters or other users.

The establishment of additional non-road bicycle trails in the forest will add significantly to the supply of trails in the region. The master plan Regional Analysis information shows an overall deficit in recreational bicycle trails. The regional supply of non-road bicycle trail would increase by 15 to 20 miles.

The establishment of 25 miles of horseback riding trail, plus the construction of equestrian camping and group camp facilities will make a contribution to the overall supply of horse-related recreation in Marinette County and the northeast Wisconsin Region. Seasonal increases of equestrian enthusiasts to the forest from outside the region can be expected, as well as increased supply and therefore utilization by local horseback riders.

The construction of an Indoor Group Camp facility at Peshtigo River State Forest will provide a new resource for campers. A similar facility is planned for Governor Thompson State Park. Since the two locations are several miles from one another, no conflict is anticipated. Further, because of the isolated, rustic nature of the indoor group camp experience, no conflict would be anticipated with local hospitality businesses.



The continued routing of existing snowmobile trail segments within Peshtigo River State Forest will not have an appreciable effect on the overall supply of snowmobile trail in the area. Localized impacts of re-routed snowmobile trails could occur where trails pass within earshot of private properties. The occurrence of this impact is sometimes subjective in nature, varying with the individual property owner's appreciation of snowmobiles. No net change in trail mileage is anticipated. However, the effect of this continuation will be one of assuring stability to the existing regional snowmobile trail system.

A new snowmobile trail link between boat landing 2 area and boat landing 5 is planned by local snowmobile advocates. It would be between two and five miles in length. The new snowmobile trail link is supported in concept by the master plan, however the details of its route must be agreed upon prior to implementation. This new trail link may or may not be open for winter ATV use, depending on the existing designation of the system it links with. This link would have the effect of increasing the available snowmobile trail mileage and providing an alternate route connector, making the local trail system more versatile. Other impacts would be increase snowmobiles in the forest as well as an increase of perceived sound levels due to the presence of snowmobiles in areas previously free of this activity.

Increases to the regional supply of Hiking Trail (33 miles total), Swimming Beach (2 designated beaches), Picnic Areas (2), Snowshoe Trail (1 designated mi. approx.), and Cross Country Ski Trail (about 2.5 mi. link) are also anticipated when the Plan is implemented. The primary anticipated impact is the supply increase of opportunities for participation in these activities as well as a slight increase in human, albeit silent, activity in areas heretofore undisturbed.

# IMPACTS ON BOATING ACCESS SUPPLY AND NR 1.91 IMPLICATIONS

#### Alternative Public Boating Recreation and Waterways **Protection Plan**

Boat landing upgrades and parking lot expansions are anticipated to have beneficial effects on the overall quality of waterbased recreation on High Falls and Caldron Falls Reservoirs and the Peshtigo River. While existing access facilities provide more than required capacity for the reservoirs, some additional parking capacity is recommended. This additional parking is intended to alleviate existing unsafe overflow parking conditions adjacent to the access sites. This typically occurs on roadsides adjacent to the existing parking lots, causing potentially unsafe traffic conflicts, especially on Parkway Road, a major local traffic artery.

Administrative Code NR 1.91 gives minimum and maximum levels of public boat access for lakes. This capacity is gauged



by the number of parking spaces for boat trailers and their towing vehicles. The Department may exceed the maximum recommended capacity if an "Alternative Public Boating Recreation and Waterways Protection Plan" is written. Such a plan must address both environmental and social developmental factors. The content of the section of the Environmental Assessment titled "Impacts on Boating Access Supply and NR 1.91 Implications" serves this purpose.

#### Purpose and Need for Boating Access Upgrades

The master plan for the Peshtigo River State Forest lists eighteen (18) boating access sites. Each has been field-inspected and recommendations have been made for maintenance, repair and improvement projects ranging from minor fix-ups to major rebuilding in two cases. Three of the listed sites are canoeaccess-only on segments of the Peshtigo River and therefore, do not figure in the NR 1.91 regulation. The remaining fifteen (15) are traditional boating access sites of varying size, quality and capacity, with launch ramps and parking for boat trailers and their towing vehicles. The Current and Planned Recreation Facilities Map shows the locations of theses sites and table 2.12 shows in tabular form, the planned actions.

Most of the fifteen traditional boating access sites, with the exception of boat landings 3, 6, 9, and 12, need to have the existing parking areas reconfigured and articulated to provide more efficient use of the space and to keep vehicles parked in designated areas only. The Woods Creek (#6) site was recently rebuilt by WPS and, therefore, no parking changes are proposed. Roaring Rapids (#12) was judged to be adequate, with no planned changes. Musky Point (#9) will be completely rebuilt and moved as part of a larger Day Use Area

development. Boat trailer parking will be reconfigured and expanded by up to 30 spaces at East Bay (#3).

Additional parking capacity is proposed at the most popular four of the fifteen access sites. This is intended to alleviate overflow parking conditions that typically occur during spring and summer weekends and holidays. When the available parking spaces fill, boaters will generally park their trailers and tow vehicles along the edges of the parking lot access drive or on the shoulder of the nearest town or county road. Congestion, traffic conflicts and an unsightly visual condition are the result. This condition has been observed by staff on a regular basis. Currently there are estimated to be 309 existing boat trailer parking spaces at the 15 existing motor boat access sites in the forest. An additional 80 boat trailer parking spaces are planned. This would provide a total of 389 boat trailer parking spaces, an increase of 21%.

The increases in parking capacity would mitigate the existing overflow parking situation. It is not anticipated that the overall level of boating utilization on the flowages would increase because of increased parking. To prevent further overflow parking, the access drives and adjacent public roads leading to all boat landings would be posted as No Parking zones for a distance of one quarter (¼) mile with the cooperation of local units of government.

Two designated Day Use Areas are planned. These will incorporate boating access sites Musky Point (#9) on Caldron Falls and East Bay #3 on High Falls. These areas will provide swimming and picnicking facilities separated from the boat access sites. The boat access component of the East Bay (#3) will provide up to 50 dedicated boat trailer parking spaces in addition to up to 100 single-car parking spaces intended to support picnicking and swimming area needs. The Musky Point Day Use Area would include a boat access site with space for up to 30 boat trailers plus up to 100 single-car parking spaces to support the picnicking and swimming area needs. Both day use areas would also provide an open picnic shelter with electricity. Picnic area parking at both East Bay and Musky Point may be developed in phases, with up to 50 parking spaces developed at each, initially. Later, as needs indicate, the remaining spaces would be built. A State Park and Recreation admission sticker would be required for use of these two areas.

No increase to boat trailer capacity on Caldron Falls Reservoir is needed. A project is being implemented to renovate existing boat landing 13 at Governor Thompson State Park. A net increase of 38 boat trailer parking spaces is included in that project.

## **ENVIRONMENTAL FACTORS CONSIDERED**

Lake size and irregularity

Caldron Falls and High Falls reservoirs have very irregular shorelines, providing a good supply of secluded areas for boating and fishing. This planned action will not affect the size or regularity of the shoreline.

· Lake depth and contour

The reservoirs of the Peshtigo River typically have a shallow gradient near shore, except where the original river bed lies close to bedrock outcrops and where it forms a steep-sided trench surrounded by shallower gradient lakebed. With the possible exception of excavation of the lakebed in the immediate vicinity of launch ramps that would be rebuilt, there would be no anticipated impact on the lakebed depth or contour. Appropriate measures would be taken to prevent siltation or undue disturbance during construction. Measures would include the use of silt barriers, silt fences and containment booms.

• Sensitive areas for fish, wildlife and aquatic plants

There would be no anticipated effects as a result of additional boat trailer parking. Potential relocation of launch ramp at access site Musky Point (9) would proceed only after on-site examination for sensitive areas for fish, wildlife or exotic plants. All renovated boat landing parking areas will be engineered to direct surface runoff away from the launch ramps to alleviate erosion and siltation now occurring and to prevent siltation from occurring as a result of any future renovation or expansion.

 Nature and composition of fish, wildlife and presence of threatened or endangered resources

A preliminary finding based on the Natural Heritage Inventory indicated no such areas would be involved in the general areas where for these facilities will be sited.

Caldron Falls Flowage is a designated "Outstanding Resource Water" as described in Ch. NR 102, Wisconsin Administrative Code. Therefore, no increase is needed for boat trailer capacity for boat access sites on Caldron Falls, beyond the net 38-space increase being implemented as part of Governor Thompson State Park.

Lake bottom sediment types

Lakebed and sediment types are primarily sand overlain by deposits of silt and in some areas relatively thin layers of organic material resulting from accumulations of leaves

and rooted aquatic vegetation. Increased boat trailer parking is not anticipated to have any effect on the lake bottom or sediment types.

It is anticipated that the engineering and design associated with renovation of all boat access sites in the forest would eliminate or minimize the amount of silt and sediment currently reaching the lakebed.

#### • Sensitivity to exotic species

The issue of invasive exotic species is addressed in the master plan. The number of boat trailer parking spaces is not anticipated to have an effect on the number or type of invasive exotic species.

#### Water quality

While an overall increase in the number of boat trailer parking spaces is not expected to have an impact on water quality, the upgrading and reconstruction of access facilities would. When each of the boating access facilities is upgraded, the surface drainage patterns would be designed so that surface runoff does not directly enter the waterway.

#### River or stream characteristics

An increase in parking capacity for boat trailers is not anticipated to have any effect on the innate characteristics of the Peshtigo River.

## SOCIAL AND DEVELOPMENTAL FACTORS CONSIDERED

Shoreline beauty

The plan endeavors to preserve shoreline beauty. Any disturbance within the 200-foot zone must be approved by FERC and would be designed and implemented with the visual characteristics in mind.

#### Shoreland zoning

The 75 foot shoreland zone will be observed. Further, development is limited within 200 feet of the shoreline by terms of the FERC license, under which the reservoirs are operated. FERC has approval authority over development in the 200 foot zone.

#### · Land use and land cover

Land use and cover type would not be changed by implementation of this master plan.

• Traditional, existing and potential water uses

Traditional, existing and potential future water uses would be consistent with the master plan and as regulated by state statute. All existing rules would continue to apply. Expansion of boat trailer parking capacity would not have an impact on water uses permitted.

#### Ability to regulate land use and development

The Department has authority to regulate land use and development within the borders of the forest on state owned land. Land use and development is described authorized in the approved master plan.

#### Ability to enforce public safety regulations

The department has authority to enforce laws and regulations on state property, or off state property when deputized by state or local law enforcement agencies.

Water use regulations proposed or in effect

Slow-no-wake zones may be established for public safety and resource protection within the forest boundary.

#### Proximity to other waters

The Peshtigo River and its reservoirs within the forest boundary comprise the single largest recreational water resource in the immediate area. Other notable recreational waters in the area include Lake Noquebay 10 miles east of the forest, Thunder Lake one mile south and White Potato Lake about 6 miles south. The Menominee River bordering Michigan is about 20 miles to the east. Boating access to the Peshtigo River and its reservoirs is expected to increase slowly over time and is anticipated to have little effect on surrounding recreational waters.

#### Proximity to population centers

The population of Crivitz, the nearest town, is about 1,050 persons. The population of Stephenson and Silver Cliff Townships, which surround the forest total about 3,700. (Stephenson Twp – 3150 pop. Silver Cliff Twp – 550 pop.) During the summer months this number increases due to the number of seasonal residences and resorts present. The expanded capacity of boating access parking lots may have an incremental effect of increasing summer regional populations, however, the actual number of boating access sites will not increase as a result of master plan implementation.

#### Demand for recreational opportunities

Increasing the capacity of boat trailer parking is not anticipated to have any effect on the demand for other recreational facilities. The expansion is intended to provide



adequate, safe parking for existing levels of boating access.

• Impact on public safety

Increasing the capacity of boat trailer parking is not anticipated to have any negative effect on public safety. The expansion is intended to provide adequate, safe parking for existing levels of boating access. The positive effect of eliminating potential traffic conflicts due to roadside overflow parking is anticipated.

- Presence of culturally or historically significant features
  No effect is anticipated. All construction sites would be surveyed for cultural and historic values prior to disturbance.
- Trespass problems associated with increased access on rivers and streams

No impact is anticipated because nearly all the shoreline on the flowages is already in public ownership. Areas of closer proximity, such as trails located near private land boundaries, will receive special treatment to avoid or mitigate negative impacts. Measures would include fencing, signing and screen plantings or others.

#### IMPACTS ON FOREST COMMUNITIES

Management of the vegetation in the 200-foot buffer zone on the shorelines of the Peshtigo River and its reservoirs would follow aesthetic management prescriptions. The exception would be in case of a natural disaster or the need to remove a hazardous tree from a designated use area or trail. The longrange effect of this management would be the development of an old-growth character, with coarse woody debris evident on the ground and a broad age profile of climax forest.

Vegetative management in designated use areas, such as campgrounds or boat landings, would include removal of trees for construction, supplemental planting of new vegetation for landscape purposes and the removal of diseased or hazardous trees when the need arises. The effect of this management could be a gradual thinning of the forest and a more open appearance in designated use areas. This impact could be mitigated by planting of new vegetation of the appropriate type for the site.

Two primary forest management objectives are prescribed in this master plan: Native Community Management and Forest Production Management. A 200-foot Shoreland Management Overlay Zone has been designated around the perimeter of all waters within the forest boundary. This encompasses the Peshtigo River and its flowages.

Below are broad management objectives for both Native Community Areas and Forest Production Areas. The preferred alternative contains specific management objectives for each area. Both management classifications are subject to the Federal Energy Regulatory Commission's 200-foot buffer zone along the river and flowages. Forest management activities in the Federal Energy Regulatory Commission buffer zone are limited to insure scenic and aesthetic qualities of the riparian area. More than 1,000 acres of forest land around the flowages is in the Federal Energy Regulatory Commission buffer zone.

#### IMPACTS ON NATIVE COMMUNITY MANAGEMENT AREAS

- Native plant and animal communities, and other aspects of native biological diversity will be restored and maintained.
- A mosaic of community types dominated by an older closed canopy forest of longer lived species, such as pines (on the uplands) and northern white cedar (on the lowlands) will be maintained.
- A diversity of forested and unforested wetlands will be maintained where suitable.
- Water quality, including coarse woody habitat will be maintained, protected and enhanced.
- Rare species, habitats and rare natural communities will be protected.
- Opportunities for research, education and ecological interpretation will be provided.

# **IMPACTS ON FOREST** PRODUCTION MANAGEMENT AREAS

- Timber and other forest products will be produced sustainably.
- Scenic qualities of the Peshtigo River and flowages will be maintained and enhanced.
- · Water quality and riparian habitat will be protected, maintained and enhanced.
- White, jack and red pine will be increased where suitable.
- A diversity of forest types and ages for forest health, aesthetic appeal and wildlife habitat will be maintained.

#### **IMPACTS ON LAKES**

Anticipated impacts on Caldron Falls, High Falls, Johnson Falls, and Potato Rapids Flowages, as well as Spring Rapids and Seymour Rapids would be beneficial. The agents of these benefits are natural shoreline management in the Shoreland Management Overlay Zone. Development of public use areas and facilities would prevent or mitigate negative impacts, primarily by limiting tree cutting and keeping structural development out of the Shoreland Management Overlay Zone except where prescribed in the master plan.

A number of smaller named lakes and some unnamed lakes are located within the existing boundary of the forest. Wherever forest management activities or construction activities would potentially affect these bodies of water, best management practices would be implemented to protect the water resource. This would have the effect of providing long-term aesthetic and biological protection for the small inland lakes and ponds.

#### IMPACTS ON SPRINGS AND SEEPS

State Forest ownership and management would have the effect of safeguarding the water quality and biological diversity of the water systems associated with the forest. Some additional land acquisition to increase the scope of control over these systems as outlined in the master plan will enhance this protection. Land management classifications have been chosen for these areas that would have the effect of preventing degradation of these resources by development or conflicting use.

# IMPACTS ON INVASIVE EXOTIC PLANTS

A program of regular monitoring and inspection for invasive exotic species would be implemented. Both aquatic and terrestrial species are included. Some common invasive exotics that would be monitored are purple loosestrife, garlic mustard, spotted knapweed, tatarian honeysuckle, buckthorn,



black locust, Eurasian water millfoil, etc. Department policies in place that address these threats to the resource base will be followed. Control measures appropriate to the species of invasive would be used. These may include manual harvesting, plowing, use of herbicides or poisonous agents, fire, natural predators and magnetic pulses. The effect would be a purifying of the biotic community and a protection from future invasions.

#### IMPACTS ON ENDANGERED OR THREATENED SPECIES

Eighteen rare animal species have been documented in the Peshtigo River State Forest, including one State Endangered, three State Threatened species, and the Federally Threatened Bald Eagle. A timber wolf pack is known on the northern portion of the Biotic Inventory's study area, and there is another known occurrence just outside the northern end of the forest. The Timber Wolf, formerly a federally listed Endangered Species, has recently increased in population numbers and has been removed from the Federal list of Endangered Species. This status may change if a significant downturn in wolf population were to be noted.

The majority of rare animals documented within the Biotic Inventory are associated with aquatic or wetland habitats. The Peshtigo River provides important habitat for many of these species including five that are globally rare. The dry uplands are also important for some species including a rare tiger beetle. Only one nest territory for the northern goshawk was located on the Peshtigo River State Forest. The property lacks large tracts of mature, closed-canopy forest needed to sustain this and other rare birds, including the red-shouldered hawk. However, there are areas on the forest that could provide future opportunities to benefit these species. Implementation of the Plan would, at a minimum, ensure continued safeguarding of these endangered and threatened species and over time, perhaps increase their foothold in the forest environment.

# IMPACTS ON HISTORICAL. CULTURAL AND ARCHAEOLOGICAL RESOURCES

Work completed by Wisconsin Public Service Corporation for the Federal Energy and Regulatory Commission re-licensing program found evidence of historical and archaeological resources within the region. The WPSC identified eight previously recorded prehistoric and historic sites. Field reconnaissance found 55 sites along the shorelines, of which 22 are affected by either hydro project operations or public recreation. Most sites have late Woodland (Native American) components dating from A.D. 500 to 1634. The Johnson Falls, High Falls and Caldron Falls hydroelectric dams and powerhouses are eligible for inclusion into the National Register of historic places.



As part of the 1837 and 1842 treaties the Native Americans gave up timber harvesting rights. However, they retained the rights to such activities as hunting, fishing, as well as the gathering of firewood, boughs, tree bark, lodge poles, marsh hay, wild rice, and maple syrup. These activities are retained because it has been determined by the courts that they are usual and customary activities of the Chippewa at the time the treaties were signed. It is anticipated that nothing in this plan would hinder or reduce the exercising of these treaty rights.

#### ECONOMIC EFFECTS AND THEIR SIGNIFICANCE

Acquisition of land for Peshtigo River State Forest is anticipated to result in an increase in tax revenues to local units of government. The Department began paying local government aids-in-lieu-of-taxes under a statute enacted on January 1, 1992. Each time a new property is acquired by the DNR, the purchase price is set as an equivalent of an assessment, and aids-in-lieu-of-taxes are paid on that basis. Therefore, one of the impacts of acquisition of additional land for Peshtigo River State Forest would be an increase in these payments. Because the purchase price is often higher than the equalized assessed value of the property, the DNR's payment is often greater. In 2006 the Department paid over \$377,400 in aids-in-lieu-oftaxes for state land in the Town of Stephenson, which includes the Peshtigo River State Forest and Governor Thompson State Park. As additional land is acquired for Peshtigo River State Forest the dollar amount paid to local units of government will continue to increase.

Growth in tourist numbers will increase utilization of local business establishments. Economic benefits are anticipated to result from an influx of visitors to Peshtigo River State Forest. Recent data indicates that in the Northeast Region of Wisconsin local resident forest visitors contribute an average of \$19.12 per day to the economy, while non-local forest visitors contribute an average of \$57.46 per day. Current visitation to the forest is estimated to be 100,000. Annual tourist visitation to Peshtigo River State Forest is anticipated to result in economic impact of approximately \$6.5 million annually.

Economic benefits would also result from forest management activities. Hardwood pulp and sawlog markets fluctuate somewhat, however, annual revenues from logging activities on the forest could be expected to average about \$134,000 per year at a harvest rate of about 200 acres per year.

Benefits during construction of forest facilities and features would be realized by building trade members and laborers, and suppliers, some of whom may be local residents. Competitive bidding practices and state purchasing procedures will be followed. Total development cost for the forest is expected to amount to approximately \$3.13M at completion, although the actual work may be spread over a considerable span of time.

No estimate of dollar amounts flowing to the local area is available because the total estimated cost and the extent of local contractor involvement is not yet known.

Employees working at Peshtigo River State Forest would probably live in the vicinity of the forest. Those employees would participate in the local economy and expend a significant amount on their daily needs as members of the community.

Implementation of the Plan's forest management objectives would help sustain the stability of employment in the local logging industry. Since logging has been an integral part of the management of this property historically, implementation of the Plan would assure a continued flow of wood products and therefore, both wages for laborers in the field, and also a continued revenue stream for the industry. Slightly increased revenue to the state is also anticipated from the sale of wood from the forest. Revenues from the sale of timber would depend on the market price for wood as well as the number of acres and species of trees to be harvested in a given year. As mentioned above, revenues of \$134,000 per year are possible.

#### **Recreation Fees**

Some revenue would be generated from recreational fees collected from the public at the two day use areas that would be fee-required areas, plus camping fees generated at Old Veteran's Lake Campground. This revenue is not anticipated to be large in comparison to that generated from the sale of wood, however.

A 31 unit primitive campground could be predicted to generate gross revenue of about \$33,000 to \$40,000 plus reservation fees. Exact estimates of revenues are not available until a base level of use has been established, however. The 20 site equestrian camp and the 60 unit equestrian group camp could generate up to \$25,000. The indoor group camp could contribute about \$4,200 per year.

The two day use areas could generate fee revenue of about \$25,000 each per season or \$50,000 per year. This would include picnic and swimming use as well as boat launching.

# FISCAL EFFECTS

Lands purchased for addition to the forest would likely be acquired using State Stewardship funds or a similar bonding fund. Similarly, bonding programs fund the development of much of Wisconsin's State Forest System. The cost to the state of bonding for land acquisition and project development occurs when the dividends are paid on the bonds. Several methods of making these payments could be used, the main one being General Fund Support. Conversely, a benefit would accrue to the holders of the same bonds.

The Wisconsin State Forest program budgets for its capital development needs on a biennial basis, as do all state agencies. Because of the significant cost of developing Peshtigo River State Forest, funding priorities within the capital budget would necessarily be adjusted to accommodate building the forest.

Recurring expenses for forest operation and staffing would be an unavoidable fiscal effect of forest operation. It is anticipated that if full development and staffing were already achieved, including 31 family style campsites, the annual operating budget would be in the range of \$206,000 to \$330,000. This compares with similar sized properties such as Governor Knowles State Forest in Burnett and Polk Counties.

#### **Estimated Costs of Development**

Note: Costs for development of Peshtigo River State Forest are based on 2006 dollar-values and assume full completion of all construction. In actuality, work may be phased over several state capital biennial budget cycles to avoid a disproportionate load on the capital budget in any one biennium. Development costs will vary due to inflation with the passage of time and the results of competitive bidding for construction.

TOTAL ESTIMATED COST	\$3,601,000
Mountain Bike Trail Construction	\$24,000
Cross Country Ski trail Expansion	\$3,000
Equestrian Group Camp Construction	\$200,000
Equestrian Campground	\$250,000
Equestrian Trailhead Construction	\$150,000
Equestrian Trail Construction	\$30,000
Snowmobile Link Trail	\$18,000
Trail System PRSF Connector	\$50,000
East Bay Day Use Area	\$250,000
Musky Bay Day Use Area	\$250,000
Water Access Upgrades	\$995,000
Water Access Campsites	\$45,000
Indoor Group Camp	\$350,000
Campground Renovation and Exp (Old Vet's Lake)	\$250,000
Shop/Storage Building, Shared	\$313,150
Forest Entrance Visitor Station, Shared	\$417,850

#### ESTIMATED COSTS OF LAND ACQUISITION

As required by state and federal laws, the Department pays just compensation for property, which is the estimated fair market value based on an appraisal, unless the seller chooses to make a gift or partial donation of land.

The master plan recommends that about 47,000 acres of land be acquired for addition to Peshtigo River State Forest. This includes expanded boundary recommendation described in the Preferred Alternative. The land that would be added to the forest boundary would be valued at an average of \$126M - if acquired all at once, using present day values. Individual parcel values would vary depending on whether any improvements or buildings existed on the site as well as the individual qualities of the site. It is unlikely that all tracts within the expanded boundary would be available for acquisition simultaneously, so expenditures would be spread over a considerable span of time, perhaps many years.

# **BOUNDARY EXPANSION & ACQUISITION IMPACTS**

#### Increase forest size

Boundary expansion would increase the size of the forest to approximately 56,000 acres. State funds would be expended to purchase these additional lands unless alternate funding sources are available, or donations or partial donations of land occur.

#### **Protect resources**

It is anticipated that the acquisition of the recommended additional lands would provide protection of surface water systems of the Peshtigo River Basin. Additionally, eventual acquisition of the recommended expansion lands would provide more integral manageable blocks of forest.

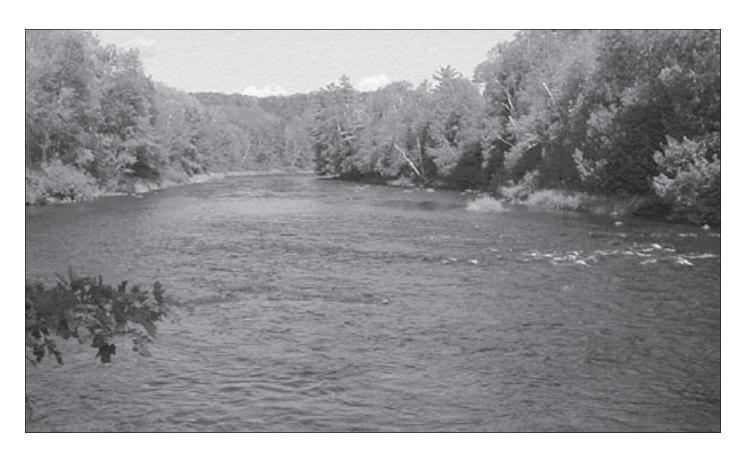
#### Change boundary configuration

The size and configuration of the property boundary would be dramatically affected. The overall size would be larger and the configuration would have a less convoluted aspect. The long, narrow character of the original property footprint would also become proportionately wider. This would eventually occur through the use of Section lines, forty lines or public roads as boundary lines. This is a generally desirable configuration that would be more easily understood by the public.

#### Payment to landowners

Payment to landowners for land acquired by DNR may provide a profit to the seller. Or, it may enable sellers to invest in other real estate in the region, thus creating an economic benefit in the real estate market.

Newly acquired undeveloped properties within the boundary would be kept in an undeveloped state, unless specifically designated for use or development in the master plan. Existing



improvements on other properties acquired, when not needed for forest purposes, would be auctioned or sold for reuse elsewhere or salvaged for materials. Slightly fewer residences and cottages would exist within the project area, thus a reduction in demand for public services such as police and fire protection occur. If the former owners relocate or build within the same municipal jurisdiction the net effect would be zero.

#### Increase in tax revenues to local government in Marinette County

Acquisition of additional land would probably increase the amount of aids-in-lieu-of-taxes paid to local governments. See discussion above, describing Economic Effects.

#### SIGNIFICANCE OF CUMULATIVE EFFECTS

The cumulative effects from the preferred alternatives for Peshtigo River State Forest would have a long-term positive effect on the quality of the human environment. In particular the public has recognized the need to preserve land and water based public land for future generations to benefit from. They have demonstrated this support verbally and in writing. The boundary expansion recommended by the master plan would further create opportunities for improved forest management and surface water system and wetland protection. This cumulative effect of resource protection and assurance of public recreational access to water is further strengthened by continued compliance with provisions of the FERC licenses for hydropower operations on the Peshtigo River.

The acquisition and management of public land on the region is not unique. Other major public holdings exist nearby including approximately 250,000 acres of Marinette County Forest, and about 661,000 acres of Chequamegon-Nicolet National Forest.

## SIGNIFICANCE OF RISK

Management and development of Peshtigo River State Forest pose a low overall potential for risk to the environment. Compared to the vast acreage of undeveloped land within the forest boundary, sites developed for day use areas, camping and water access sites will take up a very small percentage of the total. (Less than 5%)

The presence of motor vehicles and other equipment during construction may pose a slightly increased risk from spills and erosion. These risks would be mitigated by best management practice requirements put in place in the bid documents and at the preconstruction meeting with contractors.

Risk to the resources of the forest resulting from human activity during normal operation of Peshtigo River State Forest is mitigated by emergency action plans and procedures put in place by forest management staff. These plans are reviewed

annually and updated as needed or whenever circumstances

Risk of introduction of invasive exotic species may increase due to public entry and use of the property. Plans and strategies, as described in the master plan Forest Operation section, are in place to prevent and control outbreaks and infestations..

#### SIGNIFICANCE OF PRECEDENT

Approval of this management plan would not directly influence future decisions on other Department property master plans. However, this plan or portions of it may serve as reference or guidance material to aid in the preparation of master plans for similar properties elsewhere. Implementation of the objectives contained in the Plan would not be precedent-setting, primarily because all planned actions are management and development activities that regularly occur on state forests and parks in Wisconsin. Further, this property has a long history of both public recreation and forest management activities.

# SIGNIFICANCE OF CONTROVERSY OVER ENVIRONMENTAL EFFECTS

#### **Property Taxes**

One facet of opposition to expansion could be the perception that state acquisition of more land would erode the property tax base, causing property taxes to increase for other property owners. An explanation of DNR land buying procedures and aids-in-lieu-of-tax payments can dispel this misunderstanding. No other significant controversy has been raised over any anticipated or perceived environmental effect.

# DISAGREEMENT OVER RECREATIONAL STYLE. USES ALLOWED OR NOT ALLOWED

Some individuals have advocated extreme primitive management and others have advocated for mechanized recreation modes. The Vision Statement and Goals suggest the preferred alternative management measures for the property which emphasize non-motorized recreation. Advocates of All Terrain Vehicle use have expressed a desire to create a connecting link between two unconnected systems of multi-season ATV trail. The Department is committed to working diligently with ATV stakeholders to address this issue and to arrive at the best feasible solution.

The horse riding community has strongly advocated for the establishment of horse trails in the forest. This master plan does include recommendations for providing horse riding trails, and equestrian-oriented camping facilities. The forest also has a number of public roads, which are legally open to horseback riding. This fact provides immediate opportunities for horse use in Marinette County while development of designated horse trails can be implemented.

#### HANDICAP ACCESSIBILITY OF BOATING FACILITIES

Federal Law and Wisconsin statutes require that boarding docks provided at boat access sites be handicap accessible. An accessible boarding dock must also be provided with an accessible travel route between it and a designated accessible parking space. All such facilities within the Peshtigo River State Forest will be brought into compliance. This will take place, at a minimum, whenever new facilities are developed or when existing facilities are substantially repaired or replaced.

# MODIFICATIONS MADE AS A RESULT OF PUBLIC COMMENT

The Master Plan and Environmental Assessment were published in March 2007. Two public meetings were conducted, followed by a 45-day public comment period. The issue that generated the most comments expressed a desire for the forest to provide a regional multi-season ATV connector trail. About ¾ of the letters, e-mails and verbal comments received during the review period spoke in favor of this issue.

Some comments opposing ATV trails were also received, but it was a small minority by comparison. The content of the master plan has been modified slightly to acknowledge the existence of this issue. However, no substantial change to the plan itself has been made. Instead, a separate public involvement planning process will be conducted. This is being done to provide the opportunity for a thorough and open exploration to the issue, as well as assuring that the overall master plan, minus this issue, can be presented to the Natural Resources Board on schedule.

Another issue that surfaced expressed concerns over the establishment of a new Day Use Are at East Bay, adjacent to Boat Landing #3 and the expansion of the boat landing parking capacity.

Related to this were comments questioning the expansion of boat trailer parking at several of the more heavily-used boat landings in the forest. There are 309 existing boat trailer parking spaces in the forest. Concerns over boating density



increases on Caldron Falls and High Falls Flowages have been taken into consideration. A reduction of 55 spaces in the previously proposed increase in boat trailer parking has been implemented. The intent of this 30% reduction is to mitigate concerns about overcrowding on the water.

The original proposal stated the addition of 235 additional boat trailer spaces was proposed. This figure was erroneously reported due to miss-counting. The actual proposal was for an additional 185 spaces. This brings the total number up to 482, not 532 as stated in the Draft.

Furthermore, recent concerns raised by staff over the potential threat to the status of Caldron Falls as an "Outstanding Resource Water" have been taken into consideration. There will be no expansion of boat trailer capacity on Caldron Falls, except that being done as part of development of Governor Thompson State Park at boat landing 13 (see discussion of Caldron Falls Flowage below).

East Bay 3 will be reduced from the proposed total of up to 75 spaces to up to 50, a net increase of 30 spaces, giving credit for the 20 existing spaces.

Rock Cove 7 will be reduced from the proposed total of up to 80 spaces to up to 60, a net increase of 20 spaces, giving credit for the 40 existing spaces.

Crandall Creek 11 will not be expanded beyond the existing 15 spaces.

The reduced proposal will provide up to an additional 80 boat trailer parking spaces in the forest, bringing the total up to 389.

Further changes to the Day Use Area plans include the phasing of development for the Picnic Area parking lots. Each calls for a separate up to 100-car parking lot. These would be constructed in phases to match the pace of utilization. Each would begin as an up to 50-car parking lot with increase to full capacity if and when conditions indicate.

Concerns over compliance with NR 1.91 which governs the development of boating access to waters were noted in the "Preferred Alternative" phase of the master plan. Subsequently, a narrative addition to the EA was created in compliance with NR 1.91 requirements to provide an "Alternative Public Boating Recreation and Waterways Protection Plan" This section of the EA has been modified to reflect changes made to boat landing capacities and day use area parking.

#### CALDRON FALLS AN OUTSTANDING RESOURCE WATER

Caldron Falls Reservoir (among eight others) is a designated "Outstanding Resource Water" as defined in NR 102.

Six environmental indicators were used in the Outstanding Resource Water designation:

- Water chemistry
- Sediment quality/benthos
- Phytoplankton
- Macrophytes
- Fish communities
- Riparian zone habitat

Caldron Falls scored 25 out of a possible 30 points in the ranking.

The underlying assumption is that increased boat trailer parking capacity would have a negative impact on water quality and habitat. Upon learning of this special designation, three alternative actions were identified. At the direction of the Master Plan Sponsor Team the following action was selected: The master plan will not propose any increase in boat trailer parking capacity on Caldron Falls Flowage, except those developed pursuant to the recently-approved master plan for Governor Thompson State Park at Boat Landing 13.

The anticipated impact of this change to the plan is that the qualities defining Caldron Falls Flowage as an Outstanding Resource Water would be safeguarded and therefore, the continuing status of Caldron Falls Flowage would be assured.

A discussion of the three alternatives is contained in Chapter 5 of this document.

## MODIFICATIONS MADE FOR OTHER REASONS

Several changes to the master plan and subsequent Environmental Assessment (EA) have been made for editorial or other reasons not indicated by public input. These include the addition of a vault toilet to boat landing 4 because of high usage. Each of the planned new Day Use Areas have had an open picnic shelter with electric outlets added to the planned facilities. This was an omission that was discovered during plan review. These additions also influence the cost estimate for development and have been added where appropriate. Review of development costs also revealed some cost figures that needed updating and those changes were made. The estimated total cost for development using current cost figures is now \$3,601.000, an increase of \$505,000.

# Preliminary Decision on the Need for an Environmental Impact Statement (EA)

The proposed project is not anticipated to cause significant adverse environmental effects. The Department has made a preliminary determination that an Environmental Impact Statement will not be required for this action. This recommendation does not represent approval from other DNR sections, which may also require a review of the project.

# Compliance with the Wisconsin Environmental Policy Act

Project Nam	e: Peshtigo River State Forest Master Plan	County: Marinette		
DECISION	This decision is not final until certified by the appropria	ite authority)		
	ce with s. 1.11, Stats., and Ch. NR 150, Adm. Code, as complied with s.1.11, Stats., and Ch. NR 150, Wis.		ed to determine	
Complete e	ther A or B below:			
A.E	S Process Not Required			
The attached analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion, therefore, an environmental impact statement is not required prior to final action by the Department.				
B.M	ajor Action Requiring the Full EIS Process			
The proposal is of such magnitude and complexity with such considerable and important impacts on the quality of the human environment that it constitutes a major action significantly affecting the quality of the human environment.				
	Signature of Evaluator	Rogen	6.21.07	
Number of r	esponses to news release or other notice: 375			
	Certified to be in compliance with Environmental Analysis and Liaisc		6-22-07	